

ELECTRONIC FILING AND IMAGING OF COURT DOCUMENTS

A PROPOSED DESIGN AND COST ESTIMATE FOR 1996-1999

GENERAL ASSUMPTIONS 06/23/95

This proposal represents one POSSIBLE model for establishing electronic filings and electronic imaging of hard-copy documents as the official record comprising the King County Superior Court's case files. The ACTUAL model used will be a result of expert advice, bid processes, and general business process reengineering.

This basic change in the nature of the original court file will result in wide-ranging changes in litigation and the way information is transmitted within the legal community. Hand-in-hand with business process improvements by the Court, its administrative support, and the Clerk's Office, these changes can bring substantial savings and improvements in the quality of judicial decision-making, the speed of judicial processes, and everyone's access to justice. This project provides the infrastructure to enable use of "smart" electronic forms, community kiosks for litigant information, access to documents, offsite filing, and other forms of community based access to justice.

- o Overall project management provided by existing DJA and Court staff
- o One dedicated system manager position proposed (consultant or ongoing staff)
- o Initial pilot would likely be adult criminal cases, though other case groups may prove more appropriate once planning is begun; the pilot project is not yet chosen.
- o This is a multi-departmental proposal including Superior Court, Superior Court Administration, Judicial Administration, the Prosecutor, and defender agencies
- o Computers in Court/County would be already networked. Internet connection through KC/Metro.
- o Judges' tools covered in network (e.g., CD-ROM law books, Internet access, word processing)
- o Court/Clerk will attempt to reduce filed materials by strict enforcement of rules against duplicate or unnecessary filings and by procedural reforms cutting the number of documents required in court files.
- o Existing LAN administration will be utilized in supporting/integrating systems
- o Basic assumptions about electronic document types to be handled:

| | |
|---|-----|
| Documents submitted in electronic form (EDI) / automated docketing: | 40% |
| Documents submitted as hard copy, to be imaged / clerk-docketed: | 60% |
| Hard copy sent in by fax, captured electronically: | 20% |
| Hard copy delivered to Clerk, to be scanned into electronic format: | 80% |
- o For cost estimating, assumed percent for ongoing annual upkeep for equipment and software: 5.00%

ELECTRONIC FILING AND IMAGING OF COURT DOCUMENTS

A PROPOSED DESIGN AND COST ESTIMATE FOR 1996-1999

This proposed design creates an infrastructure of electronic documents and files. Gains in productivity from eliminating hard copy and its limitations will be greatly enhanced by overall business process improvements. A committee including judges, court staff, clerk's staff, prosecutors, defender agencies, and private practitioners has already begun discussions on how to plan and gain from such restructuring.

I. Project Coordination and Programming Staff \$241,284

To assure orderly planning, development, piloting, and startup of project.

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| Project Management: Existing Court & County Staff | \$0 |
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| Business Process Redesign: Existing Court/County Staff | \$0 |
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| Project Design and Programming (Consultant or New Staff) | \$90,000 |
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| 1st Year of Contract or Position | \$65,000 |
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| Specialist support as needed | \$25,000 |
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| Transitional Staff Required (Parallel New Imaging Tasks) | \$151,284 |
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| 4.57 FTE @ \$33,131 (Salary=> \$25,116 \$8,015 <=Benefits) | |
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(FTE level is driven by volume of documents which must be scanned as images.)

II. Electronic Filing Receipt and Management \$320,921

Hardware and software required to receive electronic filings: Includes electronic signature verification, data extraction, automated docketing to SCOMIS, routing as needed for Clerk's actions, electronic receipt/legal service, and filing of documents in the electronic court file. Also provides rapid user access to electronic filings. (Costs are estimates built from consultation with vendors and persons experienced with court technology.)

| | |
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| Gateway Computer System (Receipt & Security "Firewall") | \$87,000 |
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| UNIX Computer (IBM RS-6000) | \$75,000 |
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| UNIX Software (with e-mail) | Included |
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| Gatekeeper Software (security, etc.) | \$12,000 |
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| Internet & Modem Hookups | \$34,600 |
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| Modem Bank (multi-line) | \$15,000 |
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| Bulletin Board (BBS) System | \$7,500 |
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| Internet Start-Up | \$6,000 |
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| Internet Ongoing Charges | \$6,100 per year |
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| Document Markup/Docketing (SGML) Software | \$20,000 |
| Software to validate incoming filings, extract data from filings, interact with SCOMIS for automated docketing, route for signature verification, route for processing and filing. Assumes use of Standard Generalized Markup Language (SGML) or similar system for data markup/extraction. | |
| Publishing Software | \$25,000 |
| Handles document display from SGML electronic texts, embeds images, converts ASCII into formatted documents for display, printout, etc. | |
| Document Processing, Fast Retrieval Hard Drive System | \$50,000 |
| System (inside "Firewall") with large (terabyte capacity magnitudes) hard drive system in which recently received documents are held while processed before final filing. During high-demand period a file is copied here for quick delivery on demand to terminals, printers, workstations (originals remain in "Data Warehouse" CD-ROM jukebox system). | |
| SCOMIS Interface Programming | \$40,000 |
| Develop GUI interface with SCOMIS, integrate electronic document storage indexing with SCOMIS indexing of court documents; enable automated docketing from data embedded in electronic files. | |
| Digital Signature & Encryption Software | \$40,000 |
| Local signature processing | \$20,000 |
| Signature key database (if local) | \$20,000 |
| Estimated state taxes at 8.2% | \$24,321 |

III. Court Textbase: Document Storage & Retrieval System \$279,639

Repository of the filed electronic documents (electronic filings and images of hard copy filings), providing storage and retrieval of copies of court file documents recorded on jukeboxes of WORM (write-once, read-many) optical or CD-ROM disks.

| | | Annual Storage Needed |
|---|-----|-----------------------|
| Estimated percentage of documents e-filed: | 40% | 10 GB |
| Estimated percentage of documents imaged: | 60% | 193 GB |
| Total estimated storage capacity required annually => | | 204 GB |

| | | |
|---|-------------------|-----------|
| 114 GB per Jukebox capacity (4 drives, 64 slots) | 3 years' capacity | |
| 5.4 Jukebox Capacities Filled in 1st 3 Full Years; thus | | |
| 6 Jukebox Units Required over 3 Years @: | \$39,000 | \$234,000 |
| 204 Optical Disks/year (5 1/4" @ 1GB per disk) @: | \$120 | \$24,447 |
| Washington State Sales Tax @ 8.2% on | \$258,447 | \$21,193 |

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| See capacity estimates in "Storage Requirements" table. |
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IV. Imaged Document Management

\$420,357

Special hardware and software required to receive or create electronic images from hard copy documents. Hard copy would be faxed to the Clerk or scanned by the Clerk to convert it into "digital" (computer readable) form for electronic storage and retrieval.

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| Jukebox & Network Image Server = | 1 | \$10,050 | \$10,050 | |
| High Performance PC System | | \$3,500 | | |
| 4.2 GB Magnetic Hard Drive | | \$4,750 | | |
| Network Linkage | | \$250 | | |
| Annual Maintenance | | \$1,250 | | |
| Color Monitor (SVGA) | | \$300 | | |
| | | | | Hardware to direct handling of images & to record them into the "jukebox" storage system (optical or CD-ROM disks). |
| Image Database Server= | 1 | \$10,050 | \$10,050 | |
| High Performance PC System | | \$3,500 | | |
| 4.2 GB Magnetic Hard Drive | | \$4,750 | | |
| Network Linkage | | \$250 | | |
| Annual Maintenance | | \$1,250 | | |
| Color Monitor (SVGA) | | \$300 | | |
| | | | | Hardware holding database for images, ensuring accurate retrieval & controlling jukebox operations. |
| Image Scanners | 4.9 capacity = | 5 units | \$35,000 | |
| Daily images to scan | 12,329 | 80% of all imaged documents | | |
| Using, e.g. Fujitsu 3090-3E @ | | per scanner | | |
| 2,500 images/day @ 6/min: | 2054.80 | 4.57 FTE to scan needed | | |
| Image Scanner Processors | 6.2 | 7 | \$8,700 | \$60,900 |
| Daily Capacity (avg.) | 15,411 | 100% of imaged documents | | |
| High Performance PC System | | \$3,500 | | |
| Network Linkage | | \$250 | | |
| Annual Maintenance | | \$950 | | |
| Fax/Modem & Software | | \$1,000 | | |
| 21" Color Monitor | | \$3,000 | | |
| Image Management Software ('94 ests.) | | | | \$272,500 |
| 300-user document management system | | \$75,000 | | |
| 300-client/server software | | \$20,000 | | |
| Document Annotator/Markup Capability | | \$14,000 | | |
| Index Database Software ("Gupta SQL") | | \$9,000 | | |
| Print Server Software | | \$6,000 | | |
| Storage (Jukebox) Interface for | 6 | \$96,000 | | |
| Scanner Interface for | 5 | \$12,500 | | |
| Software Maintenance (per year) | | \$40,000 | | |

See capacity estimates in "Storage Requirements" table.

Washington State Sales Tax at 8.2%

\$31,857

V. Data Backup & Security

\$75,000

Providing for routine and long-term backup of electronic filing data to provide against data loss, including disaster recovery.

During initial pilot, backup and security strategies will utilize local systems in place for tape backup and copying of original electronic records. During the design of the overall EDI system, we will explore long-term daily backup methods, equipment, and software. (Parties filing electronically may also be required by rule to maintain copies of their filings until 60 days following case completion, as presently done for fax filings.) Long-term offsite mirroring of the text database will eventually need to be provided for. This may interface with existing County mainframe data mirroring (e.g., to Eastern Washington) and build on existing systems. Estimate presumes investment in substantial off-site memory resources for disaster recovery.

VI. User Workstations & Printers

\$1,951,062

Preliminary estimates of the new computer equipment or upgrades required by the Court and participating agencies (Court Administration, Clerk, Prosecutor, defenders), and to provide public access in the Courthouse. Actual agency needs must be defined to determine exact workstation requirements and costs.

Below incl. 8.2% tax:

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| Definition of "Standard" Desktop (1995): | \$4,950 |
| Basic high performance computer | \$3,000 |
| Fax/Modem (14,400/28,800) | \$150 |
| Productivity Software (WP, etc.) | \$300 |
| Network Linkage | \$250 |
| Annual Maintenance | \$250 |
| 17" Color Monitor | \$1,000 |
| Upgrades: | |
| Upgrade Monitor to 17" | \$1,000 |
| Judges' Laptop Upgrades | \$1,000 |

Court Equipment:
(Judges, SCA, &
Court Reporters)
\$910,287

DJA Equipment:
\$206,662

Public Use Equipment:
(in DJA Public Area)
\$116,586

Assumed workstations requiring monitor upgrade:

\$136,000

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|--|----------|
| 50 Courtrooms | \$50,000 |
| 25 DJA Staff | \$25,000 |
| 35 SCA Staff | \$35,000 |
| 21 Prosecutors' Staff (25% of positions) | \$21,000 |
| 5 Office of Public Defense (OPD) | \$5,000 |
| 0 4 Defender Agencies (25% of positions) | \$0 |

KCPA (Criminal) Equipment:
\$175,555

Public Defense (OPD)"
\$34,083

60 Judges' Laptops Required (Chambers & Offsite)
(Laptop OR Desktop: 1 per Commissioner)

\$357,000

4 Defender Agencies:
\$507,891

| | | | |
|---------------------------|--------------------------------------|-------------|----------------------------|
| New Workstations Required | | \$1,192,950 | |
| 30 | DJA Staff | \$148,500 | |
| 30 | Superior Court Staff | \$148,500 | |
| 39 | Court Reporters | \$193,050 | |
| 25 | Prosecutor's Office (Criminal) (25%) | \$123,750 | |
| 5 | Office of Public Defense (OPD) | \$24,750 | |
| 23 | Each of 4 Defender Agencies (25%) | \$113,850 | \$455,400 <=All 4 agencies |
| 20 | Public Viewing Workstations | \$99,000 | |

| | | | |
|---------------------------------------|-----------------------------------|----------|-----------|
| Printers (and Maint.) for All Users @ | | \$1,750 | \$117,250 |
| 20 | Courtrooms (1 Printer serves 3) | \$35,000 | |
| 10 | DJA Staff (new network printers) | \$17,500 | |
| 5 | SCA Staff (new network printers) | \$8,750 | |
| 8 | Reporters (1 Printer serves 5) | \$14,000 | |
| 10 | Prosecutor (new network printers) | \$17,500 | |
| 1 | Office of Public Defense (OPD) | \$1,750 | |
| 8 | Defender (new network printers) | \$14,000 | |
| 5 | Public Area Printers | \$8,750 | |

Washington Sales Tax at 8.2% \$147,862

VII. Computer Output Microfilm \$108,200

For the "indefinite" retention of court files required by law, microfilm remains the medium recognized as archival.

This would require programming software in the electronic filing system to direct output of archived files to Computer Output Microfilm (COM) machines (2, estimated at \$50,000 each) to convert pages to microfilm images. COM hardware is not now available for this system and costs will not be known until near the end of the 3rd year of project, when microfilming of eligible archived "electronic files" would begin. (We assume that, in time, as paper files are supplanted by electronic files, the files in the Clerk's office can be held, saving conventional microfilm expenditures, to be applied to COM equipment.)

VIII. Reserved for Access to Justice Component \$Unknown

Provision of community kiosks for remote access to Courthouse services and information, "smart" electronic forms and documents, telephonic/BBS/Internet access to information on court procedures, and other elements enhancing community access to justice and the Court.

**TOTAL DJA COSTS, TO BE REQUESTED FROM THE GENERAL FUND,
FOR YEARS 1 THROUGH 3** **\$2,087,788**

| | | | | | |
|------------------------|------------|---------|-------------------|------|-------------|
| Total pages (3 yrs.): | 19,828,354 | \$0.105 | DJA cost per page | | |
| Total pages (10 yrs.): | 72,227,474 | \$0.052 | " | 1996 | \$1,646,831 |
| | | | | 1997 | \$297,018 |
| | | | | 1998 | \$143,938 |

QUESTIONS?

If you have questions or need further information about this proposal, contact the Project Manager:

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STORAGE REQUIREMENTS: IMAGES vs. ELECTRONIC FILINGS

06/23/95

| | | | | | | | | | | | | |
|--------------------------------------|-----------|-------------------|----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Documents Per Day | 5,500 | actual 1995 | | | | | | | | | | |
| Pages Per Document | 4.67 | standard estimate | | | | | | | | | | |
| Pages Per Day | 25,685 | | | | | | | | | | | |
| Work Days Per Year | 251 | | | | | | | | | | | |
| Pages Per Year | 6,446,935 | | | | | | | | | | | |
| Bytes Per Imaged Page | 50,000 | | | | | | | | | | | |
| Bytes Per E-filed Page | 4,000 | | | | | | | | | | | |
| Storage Required for Images (GB) | 322 | | | | | | | | | | | |
| Storage Required for E-filings (GB) | 26 | | | | | | | | | | | |
| Total Storage Required Per Year (GB) | => | | | | | | | | | | | |
| | | | Percentage of Electronic Filings | | | | | | | | | |
| | | | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
| | | | 290 | 258 | 226 | 193 | 161 | 129 | 97 | 64 | 32 | 0 |
| | | | 3 | 5 | 8 | 10 | 13 | 15 | 18 | 21 | 23 | 26 |
| | | | 293 | 263 | 233 | 204 | 174 | 144 | 115 | 85 | 55 | 26 |

Electronic Filing 1996-2005

Cumulative Costs v. Cumulative Savings

